

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023802**Date Inspected:** 09-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

**WELDING**

This QA Inspector observed the following work in progress:

**BAY 14**

This QA Inspector observed ZPMC qualified welding personnel identified as 066421 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Anchor plate weld at panel point 126.5, of OBG Segment 14W. Weld joint is identified as SEG3020P-033. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 290~305 amperes and 25.2 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 069469 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Anchor plate weld at panel point 126, of OBG Segment 14W. Weld joint is identified as SEG3020R-002. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 280~290 amperes and 25.5 volts, which appears to be in compliance with the approved WPS.

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This QA Inspector observed ZPMC qualified welding personnel identified as 067520 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel diaphragm to Floor beam flange weld at panel point 127.3, of OBG Segment 14W. Weld joint is identified as SEG3020K-002. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 140~155 amperes and 24.7 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066239 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Anchor plate weld at panel point 126.5, of OBG Segment 14W. Weld joint is identified as SEG3020P-011. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 275~290 amperes and 25 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066261, 069841 perform welding by Shielded Metal Arc Welding (SMAW), on Vertical shear plate to Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-038. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 145~160 amperes and 25.3 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 037932, 067765 perform welding by Shielded Metal Arc Welding (SMAW), on Vertical shear plate to Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-011. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 150~160 amperes and 24.8 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform welding by Shielded Metal Arc Welding (SMAW), on Vertical shear plate to Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-065. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 140~150 amperes and 25.1 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed that ZPMC QA identified as Mr. Canon requested for Magnetic particle testing (MT) of welds in OBG Segment 13BW vide Notification NWIT # 08777. The weld numbers were identified as SEG3014B-200, 204. ZPMC NDT personnel identified as Mr. Hu Song Lin later cancelled the notification, as there was no safe access to OBG Segments 13 BW and 13 CW. The OBG Segments 13 BW and 13 CW were about to be moved out of fabrication Bay 14 to OBG Segment Trial Assembly.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Upadhye, Anand	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford, William	QA Reviewer
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